M/049/009

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER QUALITY

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April 19, 2000

Mr. Paul Spor
Tintic Utah Metals LLC
15988 Silver Pass Rd.
P.O. Box 51
Eureka, UT 84628

RECEIVED
APR 25 2000
DIVISION OF
OIL, GAS AND MINING

Dear Mr. Spor:

We have reviewed your ground water discharge permit application and supplemental information which were delivered to our office on April 5, 2000. You plan to construct a process water pond and dry stack tailings disposal facility near the Burgin Mine east of Eureka, UT in T. 10 S., R. 2 W., Utah County. The following features are relevant to the potential for ground water pollution resulting from this project:

1. Lead/Zinc/Silver ore will be processed in flotation cells. Fresh water will be used for process water. Minor amounts of flotation reagents and flocculants at non-toxic concentrations will be added to the process water. In addition, the process water may pick up minor amounts of metals and other contaminants from being in contact with the ore. Process water will be stored in a lined pond.

2. After processing, tailings will be dewatered to approximately 15% moisture content and placed in an unlined tailings disposal facility in an ephemeral drainage basin located on the mine property about 2000 feet northeast of the mill.

3. Because of the low initial moisture content and the area's low annual precipitation, discharge from the tailings pile is expected to be minimal, as demonstrated by HELP modeling. The water discharged from the pile may contain levels of cadmium slightly above drinking water standards, but these are likely to be attenuated as the water passes through the soil underlying the pile. Because of low sulfide content, any acid rock drainage from the pile is expected to be minimal.

4. Recent drilling at the site revealed that no ground water is present above 1225 feet depth. This corresponds to an elevation about 280 feet below the ground water level at the nearby Burgin

Mine. This indicates that the rocks below the tailings site are impermeable and the uppermost ground water is confined. The ground water encountered in the Burgin Mine is a geothermal aquifer with water of generally poor quality, averaging around 7000 mg/l total dissolved solids, or a Class III ground water.

Under these conditions, we conclude that operation of the project as planned is not likely to harm beneficial uses of ground water. Accordingly, the project qualifies for permit-by-rule status and an individual ground water permit and construction permit are not required.

In the permit application you propose a double synthetic liner for the process water pond. Given the characteristics of the site and the process water as described in your submittal, this level of containment does not appear necessary for ground water protection. The design of the pond liner should be determined by your needs to prevent loss of process water.

Please contact Mark Novak or Lyle Stott of this office if you have any questions.

Sincerely,

Don A. Ostler, P.E.
Director

DAO:MN:bjr

cc: Utah County Health Dept.
Wayne Hedberg, DOGM

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FILE:TINTIC UTAH METALS